

U.S. Department of Energy
Scrap Metal Management
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Line of Inquiry and Source	Expectation
1.0 Investigate The Range of Materials That The Scrap Metal Recycling Facility Accepts.	
1.1 Determine whether the facility accepts “scrap metal” only or whether it also accepts additional metal materials for recycling.	<p>While RCRA exempts “scrap metal” and certain other exempted recyclable materials, such as coke and coal tar, from RCRA regulation, see 40 CFR 261.6(a)(3), it does not exempt the remainder of recyclable materials from regulation. Non-exempt recyclable materials are generally subject to RCRA’s full regulation. Auditors should meticulously identify and evaluate the waste stream that the facility accepts.</p> <p>Scrap metal means “bits and pieces of metal parts (e.g., bars, turnings, rods, sheets, wire) or metal pieces that may be combined together with bolts or soldering (e.g., radiators, scrap auto-mobiles, railroad box cars), which when worn or superfluous can be recycled. 40 CFR 261.1.</p> <p>“Scrap metal” may also mean agglomerated materials such as drosses and fines - e.g. drosses and fines that have been subject to a unit operation, such as sintering and melting operations, which melt or agglomerate materials into scrap metal. See 61 Fed. Reg. 2338, 2362 (1996).</p> <p>“Scrap metal” also means used equipment, also known as obsolete scrap metal. EPA describes obsolete scrap metal as “scrap which is composed of worn out metal or a metal product that has outlived its original use, such as automobile hulks, railroad cars, aluminum beverage cans, steel beams from torn down buildings, and household appliances.” 62 Fed. Reg. 25997, 26011 (1997).</p>
1.2 Determine whether the facility accepts metals which do not qualify as scrap metals.	<p>“Materials not covered by this term [scrap metal] include residues generated from smelting and refining operations, (i.e. drosses, slags, and sludges), liquid wastes containing metals (i.e. spent acids, spent caustics, or other liquid wastes with metals in solution), liquid metal wastes (i.e., liquid mercury), or metal-containing wastes with a significant liquid component, such as spent batteries.” 50 Fed. Reg. 614, 624 (1985).</p>

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1.3 Investigate the facility's incoming waste stream, and interview facility managers to determine their process for screening incoming materials.	Learn whether facility managers understand the difference between scrap metal and other materials. Determine the practical processes they use, if any, as acceptance criteria. A list of recyclable materials excluded from RCRA regulation exists in 40 CFR 261.1(a)(3).
1.4 Determine methods that the facility uses to screen for radioactively contaminated scrap metal.	The Superfund Recycling Equity Act does not provide liability relief to those generators who knew that hazardous substances were mixed with recyclable materials, because in those cases the law assumes that the person intended to dispose of hazardous substance under the guise of recycling. Since radionuclides qualify as a hazardous substance, DOE should ensure that radionuclides are not mixed with recyclable materials, in this case scrap metal, to enjoy liability relief under the Superfund Recycling Equity Act. While DOE holds the responsibility to ensure that no radionuclides leave the site, it would be prudent to take advantage of a second check when the material reaches the recycling facility. Thus, auditors should inspect the facility's methods to screen for radioactive contamination.
1.5 Conclude whether facility only accepts scrap metal, or whether it also accepts materials that would trigger RCRA.	If the recycling facility only accepts scrap metal, then RCRA does not govern the recycling operation or the pre-recycling storage of scrap metal. Scrap metal processing remains free from RCRA. RCRA regulations, however, probably do attach to the residuals or byproducts that the recycling process may produce because such production probably qualifies the recycling facility as a generator of hazardous waste. See <i>City of Chicago v. Environmental Defense Fund</i> , 511 U.S. 328 (1994). If the facility only accepts scrap metal, the auditor can proceed directly to section 4.0 of this audit check list.
2.0 If The Facility Does Not Limit The Materials It Accepts To Scrap Metal, Investigate Pre-Recycling Storage of Recyclable Materials.	

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2.1 Determine whether the facility stores materials on-site prior to recycling.	<p>40 CFR 261.6(c)(1)-(2) states that “[o]wners and operators of facilities that store [non-excluded] recyclable materials before they are recycled are regulated under all applicable provisions [for TSD facilities]. However, [o]wners or operators that do not store recyclable materials [are not subject to RCRA].</p> <p>If pre-recycling storage does not occur, RCRA does not apply except for certain notification requirements, and compliance with the manifest system. See 40 CFR 261.6(c)(2). Except for these limited requirements, such non storage recycling facilities do not have to meet any RCRA requirements for treatment, storage, or disposal. <i>Id.</i> Residuals and byproducts produced will probably still fall subject to RCRA. Thus auditors should proceed directly to section 4.0 of this audit check list.</p>
3.0 If Pre-Recycling Storage Occurs, Investigate Facility For Compliance With Treatment, Storage, and Disposal (TSD) Requirements.	
3.1 Determine whether the facility possesses a RCRA permit.	<p>If the facility stores non-exempt recyclable materials, it should possess a RCRA permit. Recall that scrap metal is an exempted recyclable material, see 40 CFR 261.3(c). If the facility does possess a RCRA permit, review that permit and ensure that the facility is in compliance with its terms. If the facility operates under interim status or for some other reason does not require a permit, inspect the facility according to the criteria listed immediately below.</p>
3.2 EPA identification number & required notices. 40 CFR 264.11 & § 264.12.	<p>Facility must possess an EPA Identification number. If it accepts wastes from foreign countries, it must fulfill various notification requirements required by EPA regional administrators and EPA headquarters. See 40 CFR 264.12(a)-(c).</p>

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3.3 Inspect incoming waste analysis methods. 40 CFR 264.13.	According to 40 CFR 264.13, facilities must periodically analyze incoming waste streams in order to gather information necessary to manage the material properly under RCRA. Check to learn the methods they use to analyze incoming waste streams. Check the analysis frequency. Compare the procedures to the requirements of § 264.13.
3.4 Investigate site security. 40 CFR 264.15.	40 CFR 264.15 requires facilities to prevent unauthorized entry. Generally, they must utilize a 24 hour surveillance system, an artificial barrier such as a fence and a means to control entry at all times. Inspectors should investigate site security and compare it to the requirements of 40 CFR 264.15.
3.5 Investigate facility's methods of conducting self inspections	40 CFR 264.16 requires owners to inspect their facilities for occurrences that may cause the release of hazardous waste or a threat to human health. A written schedule must detail inspection items and frequency. Inspectors should investigate facility's inspection schedule to assure that its frequency and scope match the risks that the site poses.
3.6 Review personnel training accomplishments. 40 CFR 264.17.	40 CFR 264.17 requires facility personnel to complete classroom or on the job training designed to teach them to perform their duties in a way that ensures the facility's compliance. Inspectors should review the training records for facility personnel and compare their accomplishments to the requirements of 40 CFR 264.17.
3.7 Review procedures for special handling of hazardous wastes.	Insure that, through their analytical testing program, the facility employs a method to identify reactive, ignitable, or incompatible waste. If they do accept such waste, insure that they prevent accidental ignition or reaction of ignitable or reactive wastes. See 40 CFR Part 264.17 If they manage incompatible waste, make sure that the management methods fulfill the requirements of § 264.17.

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3.8 Consult location standards for TSD facilities. 40 CFR 264.18.	The seismic location standard, the flood plain location standard, and the underground mine location standard restrict the siting of TSD facilities. Check to see whether the facility exists within one of these locations and, if it does, make sure that they follow restrictions or special criteria that pertain. See 40 CFR 264.18.
3.9 Review preparedness & prevention precautions. 40 CFR 264.30 - 37.	40 CFR 264.30 - 37 require facilities to be designed and maintained in such a way as to minimize fire, explosion, or other unplanned release of hazardous waste. Such preparedness criteria, for example, require facilities to utilize alarm systems and acquaint local police, fire, and rescue with the layout of their facility. Inspectors should investigate facility preparedness plans and compare them to the regulatory requirements.
3.10 Review contingency plan & emergency procedures.	Facilities must have a contingency plan designed to respond to hazards caused by explosions, fires, or any unplanned sudden or non-sudden release of hazardous waste. 40 CFR 264.51. Auditors should review the contingency plan and compare it against the regulations.
3.11 Review the facility's compliance with the manifest system, recordkeeping & reporting	If the facility receives non-exempt recyclable materials that is accompanied by a manifest, the facility must sign and date the manifest to certify that the waste listed on the manifest was indeed received. Facilities must also note any significant discrepancies on the manifest. They must immediately give the transporter at least one signed copy. Within 30 days, they must send a copy to the generator. And they must retain a copy of the manifest for at least 3 years. 40 CFR 264.71. Facilities must also maintain an operating record that details the waste it has received and the location of the waste within the facility, plus a certification that efforts were taken to minimize wastes. 40 CFR 264.73. Auditors should inspect the facility's compliance with the manifest system.
4.0 The Recycling Process	

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4.1 Determine If The Recycling Process Is Part Of A Larger Hazardous Waste Treatment Operation	Regardless of whether the facility accepts only scrap metal or other types of material that trigger RCRA, RCRA does not impose regulations upon the recycling process itself. <i>See</i> 40 CFR 261.6(c)(1). RCRA only imposes regulation upon a recycling facility's process, if the recycling facility exists within a hazardous waste management unit of a RCRA-permitted facility. <i>Id.</i> Auditors should verify that the recycling facility does not exist as part of a larger hazardous waste treatment operation.
5.0 Generation of Hazardous Waste Residuals	Whether a facility only accepts scrap metal, or whether it also accepts non-exempt recyclable materials that would trigger RCRA, the production of residuals or byproducts probably qualifies the facility as a hazardous waste generator. In the case where a facility only accepts scrap metal, the production of residuals constitutes the generation of hazardous waste. <i>See</i> City of Chicago v. Environmental Defense Fund. In the case where the facility also accepts non-exempt recyclable materials, the residuals derived from recycling qualify as hazardous waste under EPA's mixture and derived from rule. A precise determination of the regulatory status of the residuals can only occur on a case by case basis. Auditors should ask facility managers whether they manage their residuals as hazardous waste and why. Subsequent reviews of RCRA law and regulations can evaluate the facility's position. In the meantime, auditors should inspect the facility's procedures to manage residuals against RCRA standards.
5.1 Identify whether the facility qualifies as a conditionally exempt small quantity generator (CESQG).	40 CFR 261.5 defines a CESQG as one who generates less than 100 kilograms of hazardous waste per month. Such generators, except for those who exceed acutely hazardous waste thresholds, do not fall subject to RCRA regulations for generators. Inspectors should review hazardous waste generation records and inspect the process that generates hazardous waste to determine if the generator qualifies as a CESQG.
5.2 Identify whether the facility qualifies as a small quantity generator (SQG).	SQGs are those who generate more than 100 kg but less than 1000 kg of hazardous waste per calendar month. <i>See</i> 40 CFR 262.34(d). With the exception of longer storage durations before transport, such SQGs fall subject to the same regulations as large quantity generators.

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5.3 Identify whether the facility qualifies as a large quantity generator (LQG).	LQGs produce more than 1000kg of waste per calendar month.
5.4 Inspect the facility's methods to identify hazardous waste that it may produce. 40 CFR 262.11.	40 CFR 262.11 requires generators to determine whether their waste qualifies as a hazardous waste. Inspectors should review the facility's methods to do so and evaluate those methods against the regulations in 40 CFR 261 which describe identification of hazardous wastes.
5.5 Review the facility's procedures for notification of hazardous waste management activities.	RCRA § 3010 requires generators of hazardous wastes to provide the information requested in EPA's form 8700-12 to EPA.
5.6 Determine whether the facility possesses an EPA identification number as a waste generator.	Hazardous wastes generators must possess an EPA identification number.
5.7 Review the facility's procedures for complying with manifest requirements.	Each hazardous waste generator must prepare a hazardous waste manifest for each off-site shipment. The manifest must designate one facility to accept the waste, and may designate an alternate. 40 CFR 262.20. The generator must sign the manifest, obtain the transporter's signature and date of acceptance, and retain one copy of the manifest. 40 CFR 262.23. The manifest requirements do not apply to small quantity generators provided that the waste is reclaimed pursuant to a contractual agreement which details the frequency of shipment, the type of waste to be shipped, and provides that the reclaimer transports the waste. 40 CFR 262.20(e). Inspectors should review the facility's manifest system to ensure it will meet regulatory requirements.
5.8 Inspect pre-shipment storage of generated waste. 40 CFR 262.34.	Large quantity generators may store waste for up to 90 days without triggering TSD permitting requirements, provided they store waste in containers, tanks, on drip pads, or in containment buildings, in accordance with regulations for such storage methods. See 40 CFR 262.34. Small quantity generators may accumulate waste for up to 180, and in some cases, 270 days, provided that they store their waste in accordance with requirements similar to large quantity generators and that waste accumulation never exceeds 6,000 kilograms, and that various emergency preparedness conditions are met. See 40 CFR 262.34.

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5.9 Inspect satellite accumulation of hazardous waste. 40 CFR 265.171-173.	A generator may accumulate up to 55 gallons of hazardous waste, or one quart of acutely hazardous waste, at or near the point where it is generated (a.k.a. satellite accumulation) for any amount of time without triggering the 90 day storage provision. However, the regulations impose significant requirements upon satellite storage. For example, the container must be adequately marked, it must be compatible with the waste it accepts, it must be kept closed except when adding or removing waste, when the 55 gallon limit is reached the generator must date the drum. See 40 CFR 265.171-173 for all the satellite accumulation requirements. Auditors should inspect any satellite accumulation areas and compare the facility's materials management to the regulatory requirements.
5.10 Review packaging and labeling procedures. 40 CFR 262.30.	Before shipping waste off-site, generators must package it in accordance with Department of Transportation (DOT) regulations contained in 49 CFR parts 173, 178, and 179. [40 CFR 262.30] Likewise, generators must label waste in accordance with DOT regulations contained in 40 CFR part 172. Auditors should inspect the facility's methods to ensure that proper packaging and labeling occurs.
5.11 Review marking procedures. 40 CFR 262.32.	Generators must mark each container, less than 110 gallons, with notice showing that it is hazardous waste. The precise wording that RCRA requires is listed in 40 CFR 262.32.
5.12 Placarding	Before transporting hazardous waste or offering hazardous waste for transportation off-site, a generator must placard or offer the initial transporter the appropriate placards according to the DOT regulations for hazardous materials under 40 CFR 172, Subpart F. [40 CFR 262.33]

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5.13 Inspect record keeping procedures.	Generators must keep three types of records. First, they must keep a copy of each signed manifest for three years. 40 CFR 262.40(a). Second, they must keep a copy of reports required to be filed by EPA (e.g. exception reports and biennial reports, discussed below). 40 CFR 262.40(b). Third, they must keep records of any test results, waste analyses, or other determinations pertaining to hazardous waste identification. 40 CFR 262.40(c). Inspectors should review facility records for compliance with recordkeeping requirements.
5.14 Inspect biennial reports.	Any generator who ships waste off-site must submit a biennial report by March 1 of every even numbered year. 40 CFR 262.41. The information requirements detail the quantity and fate of hazardous waste generated. It also explains efforts employed and success realized in minimizing the volume and toxicity of waste shipped off site. Inspectors should review copies of biennial reports to ensure that they have indeed been prepared. And, inspectors should note any success with waste minimization or toxicity reductions.
5.15 Inspect exception reports.	Large quantity generators must contact their transporter and designated acceptance facility if they have not received a copy of the manifest within 35 days from the date when the transporter picked it up. If they do not receive a copy of the manifest within 45 days, they must notify EPA. 40 CFR 262.42. Auditors should ensure that procedures exist at the facility which ensure that exception reporting will occur in the case it becomes required.